



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor
Thomas W. Easterly
Commissioner

August 1, 2008

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

VIA CERTIFIED MAIL 7007 1490 0000 0840 8257

Mr. Robert E. Lee, President
Clark-Floyd Waste Services
Clark and Floyd County Boards of Commissioners
P.O. Box 2128
Clarksville, Indiana 47129

Dear Mr. Lee:

Re: Approval of Renewal of
Solid Waste Facility Permit
FP 10-01
Clark-Floyd Landfill
Clark County

The facility permit renewal application for the above-referenced facility received on May 3, 2007, for the Clark-Floyd Landfill has been reviewed and certified as meeting the requirements of IC 13-15-1-3 and 329 IAC 10-11. This permit renewal applies to the municipal solid waste landfill located at 1 mile west of Wilson on State Road 60 in Clark County, Indiana, which contains approximately 172 acres approved for filling. The permittee or operator shall operate this facility according to the terms and requirements of this renewal permit letter and enclosures and the applicable statutes and regulations in effect on the effective date of this renewal. This facility permit renewal FP 10-01 will expire on July 1, 2013.

This permit renewal allows Clark-Floyd Waste Services to update the facility design to comply with current rules and allows operations to continue at the facility subject to the terms of this letter and the enclosed requirements. In accordance with 329 IAC 10-13-4, solid waste facility permit FP 10-01 does not authorize: any injury to any person or private property; the invasion of other private rights; the infringement of federal, state, or local laws or regulations; nor preempt any duty to comply with other state or local requirements.

In accordance with 329 IAC 10-13-3, this permit is valid through July 1, 2013. To continue operation past this period, a renewal application in accordance with 329 IAC 10-11-5.1(b) must be submitted a minimum of one hundred twenty (120) days prior to the expiration date of the permit.

Pursuant to IC 4-21.5, a Petition for Review of this permit renewal letter may be initiated by you, as applicant, or by an "aggrieved or adversely affected person." This permit renewal becomes effective once all applicable time periods for petitioning for Stays of Effectiveness have expired, unless you are notified in writing by an Environmental Law Judge that the permit renewal has been further stayed. As discussed in our enclosed Notice of Decision, if you wish to challenge this decision, you must file a Petition for Review with the Office of Environmental Adjudication within eighteen (18) days from the date that this permit renewal letter was mailed, pursuant to IC 4-21.5-3-7.

If you have any questions or comments about your application or the permitting process, call (800) 451-6027, press 0 and ask for Kelly Hall or extension 3-0449, or call direct at (317) 233-0449.

Sincerely,



Thomas Linson, Chief
Permits Branch
Office of Land Quality

Enclosures: Notice of Decision
Letter to the The Evening News
Letter to the Jeffersonville Township Public Library
Permit Requirements
Leachate Generation and Recirculation Report

cc: Clark County Health Department (with enclosure)
Floyd County Health Department (with enclosure)
The Honorable Ed Meyer, President, Clark County Commissioners (with enclosure)
The Honorable Stephen Bush, President, Floyd County Commissioners (with enclosure)
Clark County Solid Waste Management District (with enclosure)
Floyd County Solid Waste Management District (with enclosure)
The Honorable Robert D. Hall, Mayor of Charlestown (with enclosure)
The Honorable Tom Gilligan, Mayor of Jeffersonville (with enclosure)
The Honorable Douglas England, Mayor of New Albany (with enclosure)
The Honorable Paul L. Kraft, President of Clarksville Town Council (with enclosure)
The Honorable Ted Miller, President of Greenville Town Council (with enclosure)
The Honorable Douglas J. Rider, President of Sellersburg Town Council (with enclosure)

PERMIT REQUIREMENTS

- A. General Permit Requirements**
- B. Construction Requirements**
- C. Operational Requirements**
- D. Gas Emission Control and Monitoring**
- E. Ground Water Monitoring Requirements**
- F. Closure Requirements**
- G. Post-Closure Requirements**
- H. Financial Responsibility for Closure and Post-Closure**

A. GENERAL PERMIT REQUIREMENTS

- A1. The permittee shall comply with all the applicable requirements of 329 IAC 10, where not specifically addressed in this permit.
- A2. It is recommended that all required submittals be printed double-sided and sent via certified mail. An additional copy should also be submitted on CD or DVD in Acrobat PDF format. All reports, notifications, ground water reports, and other information required to be submitted by this permit should be sent to:

**Ms. Kelly Hall
Indiana Department of Environmental Management
Office of Land Quality
Solid Waste Permits Section
100 North Senate Avenue, Rm. 1154
Indianapolis, Indiana 46204-2251**

- A3. The permittee shall report to the Indiana Department of Environmental Management (IDEM) any event which may cause an imminent and substantial endangerment to human health or the environment. This information must be reported orally to IDEM within twenty-four (24) hours from the time the permittee becomes aware of the event. The permittee shall also provide a written report to IDEM within seven (7) days of the time of the event. The report shall include for each event: date and time, possible causes, actions taken or planned to correct, reduce, eliminate, and prevent recurrence of the event.

B. CONSTRUCTION REQUIREMENTS

- B1. The permittee shall comply with 329 IAC 10-17 (Construction Requirements).
- B2. The permittee shall notify IDEM in writing at least fifteen (15) days in advance of the construction of each unit or portion of the unit.
- B3. The permittee shall submit a construction certification report as required by 329 IAC 10-19.
- B4. All liner and final cover components such as: clay-type soil, drainage material, geomembrane, geotextile, geocomposite, geosynthetic clay liner (GCL), and protective cover, if applicable, must be tested and installed as specified in the approved Construction Quality Assurance (CQA) Plan and the applicable requirements of 329 IAC 10-15-7 and 329 IAC 10-17 except as otherwise noted in this permit.
- B5. All leachate collection pipes and sumps shall be free of obstructions prior to placement of waste in a newly constructed unit or portion of the unit.
- B6. Upon selection of the specific geosynthetic materials for the liner and the final cover system components, the permittee shall perform the appropriate tests to document the

interface friction values for the geosynthetic materials, soil liner, drainage layer and protective layer to be used in the construction of the facility. In the event that the newly obtained site-specific test results show that the values are less than those assumed in the calculations in the permit application, the permittee shall revise the slope stability analyses to document that the minimum factor of safety has been obtained, as required by 329 IAC 10-15-8, and 329 IAC 10-17, as applicable. The material-specific interface friction values and/or the revised slope stability analyses shall be included in the construction certification report, as required by 329 IAC 10-19.

- B7. Prior to construction of the composite final cover system, the permittee must conduct laboratory testing to determine the shear strengths of the materials identified in Tables 4a and 4b of appendix G, contained in the "Solid Waste Facility Permit Application Report", revised October 1996, to verify the adequacy of the materials selected to construct the final cover. The results of this testing must be forwarded to IDEM for approval prior to construction and shall be reported in the construction certification report(s).

C. OPERATIONAL REQUIREMENTS

- C1. The permittee shall comply with 329 IAC 10-20 (Operational Requirements).
- C2. The site benchmark shall be maintained throughout the entire life and post-closure care period of the facility and noted on all submitted maps.
- C3. a. Solid waste disposal in the twenty-five acre expansion area (Section 6) must be limited to the areas delineated by the solid waste boundary line depicted on sheet 4, titled "Final Topography", dated September 12, 1996, revised December 1996; Sheet 5, titled "Base Plan", dated November 28, 1995, revised December 1996 and Sheet 6, titled "Initial Expansion Development Plan", dated November 28, 1995, revised December 1996.
- b. Solid waste disposal in areas of the landfill, other than Section 6, must be limited to the areas delineated by the solid waste boundary line depicted on sheet 3, titled "Existing Features and Topography", dated August 20, 1996, revised December 1996 and the plans dated August 1, 1987 (horizontal expansion) and January 6, 1988 (height increase) both of which were received by this office on April 20, 1988.
- C4. The permittee shall maintain, as applicable, an adequate leachate storage capacity during the landfill operation and the post-closure period to ensure proper operation of the leachate collection system and compliance with 329 IAC 10-20-20 (the leachate collection system and sump areas located within the waste disposal unit are not considered adequate storage.) The leachate level in the sumps and manholes shall be maintained at the approved depth. The leachate storage shall be operated in an environmentally safe manner. Within twenty-four (24) hours, the permittee shall implement a leachate contingency plan if the facility is not in compliance with 329 IAC 10-20-20.

- C5. The permittee shall conduct leachate sampling and analysis as required by the wastewater treatment plant or other leachate disposal facility, as applicable, and the results shall be kept in the facility's operating record. The volume of leachate generated shall be submitted to IDEM on an annual basis on the enclosed "Leachate Generation and Recirculation Report" or on a similar report developed by the permittee. The annual leachate report must be submitted on or before March 1 of each year for the previous year.
- C6. Alternative daily cover (ADC) shall be applied in compliance with 329 IAC 10-20-14.1 and the following requirements, only in areas of the landfill that are constructed with a leachate collection system and a composite liner system in the twenty-five acre expansion area (Section 6):
- a. ADC materials permitted for use are:
 - (1) Fabrisoil, or equivalent
 - b. All ADC materials listed in Requirement C6.a shall comply with 329 IAC 10-20-14.1(f).
- C7. The storm water pollution prevention plan (SWP3) drawings and documentation dated August 2, 2004 and October 8, 2004 and received by IDEM on August 3, 2004 and December 9, 2004 has been approved with the following requirements:
- a. The surface water from the facility is currently collected by drainage swales, downdrops, and ditches, which in turn convey the water to two outlets #1 and 5, subsequently drain to Turkey Run located east of the landfill property and to three outlets, #2, 3 and 4 subsequently drain to Muddy Fork located west of the landfill property.
 - b. The facility currently has a total of five proposed sampling locations identified as Outlet #1, 2, 3, 4 and 5.
 - c. The permittee shall comply with all of the permit requirements that pertain to any previous modification and the renewal concerning the SWP3, unless otherwise specified here.
 - d. The permittee shall assure compliance with the requirements of 329 IAC 10-15-12.
 - e. The permittee shall follow the SWP3 plans and documentation dated August 2, 2004 and received by IDEM on August 3, 2004 and additional information dated October 8, 2004 and received by IDEM on December 9, 2004.
 - f. Semi-annual storm water sampling analyses data taken from the facility sedimentation ponds/basins must be submitted within sixty (60) days following the collection of each semi-annual sample. Other storm water discharge outfalls where storm water exposed to industrial activity discharges to waters of the state

must follow the sampling procedures as described in 327 IAC 15-6-7.3(a)(5) through (9) and monitor the parameters listed in 329 IAC 10-20-11(f)(1).

- g. In the event that there are any changes to a SWP3 as a result of management practices, administration changes, or other similar changes, the updated plan must be kept on-site and must be available at the time of an IDEM on-site inspection.
- h. All records and information resulting from the storm water sampling events, including all records of analyses performed and calibration and maintenance of all instrumentation, must be retained for a minimum of three (3) years.
- i. All land disturbance activities must be in compliance with the erosion/sedimentation control practices as required by and applicable to 329 IAC 10. The facility may use the document entitled "Indiana Handbook for Erosion Control in Developing Areas Manual" dated October 1992. This manual can be obtained from the Division of Soil Conservation, Indiana Department of Natural Resources.
- j. Per 329 IAC 10-20-28 regarding self-inspection, the permittee shall monitor and inspect the facility a minimum of twice each month, including all temporary and permanent erosion and sedimentation control structures such as, but not limited to, drainage features, berms, dikes, outfall discharges, rip-rap, silt fences, vegetative cover, erosion control blankets or geotextiles, sediment traps and basins, pumps and sumps, culverts and on-site borrow pits.

C8. The permittee shall conduct waste solidification at the facility in accordance with the minor modification application dated October 20, 2005, and received by IDEM on October 21, 2005, and with the request for additional information response dated December 13, 2005, and received by IDEM on December 15, 2005, and the following requirements:

- a. The stabilization basins must be leak-proof and placed over a one (1)-foot thick compacted clay pad. The pad must be sloped and bermed to prevent liquid escape from the solidification area. The compacted clay pad may be placed over the waste in a manner that does not disrupt normal activities. When placed over the waste, the compacted clay pad must be over the composite liner and leachate collection system.
- b. Any liquid on the clay pad, except precipitation, shall be immediately removed.
- c. The permittee shall develop and implement a contingency plan with exact treatment procedures and appropriate materials, and a copy of the plan shall be available on site for IDEM staff to review.
- d. Waste left overnight in the solidification process containers must be appropriately covered.

C9. The following conditions apply to the storage of waste tires in a dumpster:

- a. No more than 500 tires must be stored at the site at any given time.
 - b. All tires in dumpsters at the facility must be covered with a water-proof tarp until processing occurs.
 - c. All tires must be cut into quarters before they are disposed in the landfill.
- C10. Sediments must be removed from the sedimentation pond to insure the pond storage capacity does not fall below the design storage capacity. The permittee must maintain a record of all such sedimentation removal at the facility.

D. GAS EMISSION CONTROL AND MONITORING

- D1. The permittee shall comply with 329 IAC 10-20-17 (Explosive Gases), 329 IAC 10-20-25, 329 IAC 10-22-2, and 329 IAC 10-23-3.
- D2. The landfill gas management system shall be operated and maintained in accordance with the approved Gas Collection and Control System (GCCS) Plan, dated November 5, 1998 in a manner so as to not create a threat to human health and the environment. The permittee shall ensure proper operation of the active landfill gas management system by implementing inspection and operation procedures as outlined in the approved plan.
- D3. If any nuisance or pollution conditions are created by construction or operation of the landfill gas extraction system, immediate corrective action shall be taken by the permittee.
- D4. Any liquid collected from the active landfill gas management system shall be properly disposed in accordance with 329 IAC 10-20-20.
- D5. Any modifications to the gas collection and control system must be submitted and approved by IDEM prior to implementation.
- D6. The permittee must notify IDEM fifteen (15) days before beginning any construction of the landfill gas extraction system (including wells) at the site.
- D7. Any waste exposed during construction of the system shall be properly disposed or adequately covered on a daily basis.
- D8. Upon completion of each phase of the landfill gas extraction system, the permittee must submit final as-built plans to IDEM not more than ninety (90) days after construction has been completed.
- D9. If a remediation plan is required for the facility, a proposed remediation plan would be submitted within thirty (30) days of first documentation of an exceedance. Implementation of the remediation plan would be initiated within sixty (60) days of first documentation of an exceedance.

- D10. Pursuant to 329 IAC 10-20-17, the permittee must submit a methane monitoring program (MMP) within ninety (90) days for the commissioner's approval. The commissioner's review of the MMP will be based on the methane monitoring program non-rule policy document available on the IDEM website at http://www.in.gov/idem/rules/policies/sw/mmp_npd.html. The permittee must revise the MMP if notified to do so by the Office of Land Quality (OLQ) or if methane gas levels trigger additional remediation as required by 329 IAC 10-20-17(d). Any revision to the MMP must be approved by OLQ prior to implementation.

E. GROUND WATER MONITORING REQUIREMENTS

- E1. The Permittee shall comply with 329 IAC 10-21.
- E2. The detection monitoring system includes the ground water monitoring wells: MW 1, B2A, B2B, MW 3R, B4A, B4B, MW 5, MW 6, MW 9, MW 10, MW 11, MW 12, MW 13, MW 14, MW 15, B1, B11, and MW 16. Wells B11 and MW 9 are considered up gradient for statistical comparison.
- E3. Detection monitoring shall take place in May and November of every year.
- E4. Pursuant to 329 IAC 10-21-2, the permittee must follow the ground water monitoring plan (Sampling and Analysis Plan (SAP)) dated October 14, 2002. The permittee must revise the SAP if notified to do so by OLQ. Any revision to the SAP must be approved by OLQ prior to implementation, but will not be considered a modification of this permit.
- E5. All analytical data from required ground water sampling events must be submitted to OLQ within sixty (60) days of the sampling event. This submittal must include one (1) original unbound laboratory certified report with field sheets and chain of custody forms, one (1) PDF formatted electronic file, and one (1) electronic version of the analytical results with the field parameters including pH, specific conductance, dissolved oxygen, Eh, temperature, well depth, depth to water, and static water elevation.

The electronic version must be on a DOS formatted 3 1/2 inch diskette, DVD, or CD-ROM; or may be submitted via electronic mail (e-mail) to the e-mail address, **olqdata@idem.in.gov**. The facility name and a brief description of the file contents should be clearly marked on the digital media or typed in the subject heading of the e-mail. The electronic version should be submitted as an ASCII, tab-delimited text file and contain the facility's name, permit number, and the name of the analytical laboratory. Field parameters and analytical results must include the fields listed below:

1. Sampling Date: Month, day, and year
2. Well Name: Include permitted and corrective action wells
3. Sample Type: Regular, duplicate(s), trip blank(s), equipment blank(s), field blank(s), verification re-sample(s) and replicate(s)
4. Sample Medium: Ground water, leachate, soil, surface water, etc.

5. Species Name: Chloride, sodium, ammonia, etc. (Identify metals as being analyzed in the "total" phase or "dissolved" phase. Example: arsenic (dissolved).)
 6. Concentration (results): The entry must be a number. Do not enter text such as "NA", "ND" or "<".
 7. Concentration Units: mg/l, ug/l, standard units for pH, degrees Celsius (°C), or degrees Fahrenheit (°F) for temperature, mvolts for Eh, and umhos/cm for specific conductance
 8. Detected: Yes or no
 9. Detection Limit
 10. Analytical Methods
 11. Estimated Value: Indicate "Yes" if the reported value is an estimated value. If a value is estimated, use the "Comment" field to explain why the value was estimated
 12. Comment: Analytical lab and/or field personnel comments regarding the reported results.
- E6. Pursuant to 329 IAC 10-21-6, the permittee must revise and update the Statistical Evaluation Plan (StEP) dated August 12, 1996. Pending approval of the updated plan, the facility shall follow the current StEP. The permittee must revise the StEP if notified to do so by OLQ. Any revision to the SAP must be approved by OLQ prior to implementation, but will not be considered a modification of this permit.

F. CLOSURE REQUIREMENTS

- F1. The permittee shall comply with 329 IAC 10-22 (Closure Requirements).
- F2. The permittee shall notify IDEM in writing at least fifteen (15) days prior to the intended date to begin closure of each unit or portion of the unit.
- F3. a. The final cover of the twenty-five acre expansion area (Section 6) shall be constructed in accordance with the approved final grading plan, on sheet 4, titled "Final Topography" dated September 12, 1996, revised December 1996 and received by IDEM on January 23, 1997.
- b. The final cover of the landfill, in areas other than Section 6, must be constructed in accordance with the approved final grading plan on Sheet 3 (height increase) of the plans dated January 6, 1988 and Sheet 4 (horizontal expansion) of the plans dated August 1, 1987, both received by this office on April 20, 1988.
- c. Final cover shall be constructed whenever any area of the landfill is filled to its approved elevation, less the distance attributed to the cover materials or within one hundred eighty days of receiving its final waste volume.
- F4. Final closure shall proceed in accordance with the facility closure plan titled "Clark Floyd Landfill, Closure Plan, Existing Landfill and Expansion" dated April 3, 1997, received by IDEM on April 17, 1997, and the application and the applicable requirements of 329 IAC 10.

- F5. The cover materials must be tested and placed in accordance with the approved Construction Quality Assurance plan.
- F6. IDEM certified 62 acres of clay cover system as closed on March 29, 1999. However, post-closure of the closed portion of the landfill shall not begin until the entire facility is certified closed.
- F7. Final compacted cover of any portion of the landfill, other than Section 6, must comply with 329 IAC 10-22-7(c).

G. POST-CLOSURE REQUIREMENTS

- G1. The permittee shall perform post-closure monitoring and maintenance in accordance with the applicable requirements of 329 IAC 10-23 and with the facility post-closure plan titled, "Clark-Floyd Landfill, Post-Closure Plan, Existing Landfill and Expansion", dated April 24, 1997.

H. FINANCIAL RESPONSIBILITY FOR CLOSURE AND POST-CLOSURE

- H1. The Permittee shall annually update a financial responsibility instrument as required by 329 IAC 10-39 for closure and post-closure. Annual updates shall be submitted no later than June 15 of each year. The amount for closure shall not be less than the closure cost estimate specified in the revised closure plan with adjustment for inflation. The amount for post-closure shall not be less than the post-closure cost estimate specified in the revised post-closure plan with adjustment for inflation.
- H2. A final contour map which meets the requirements of 329 IAC 10-39-2(c) must also be submitted annually.
- H3. If facility operations, site design, or ground water monitoring are significantly changed to affect the financial responsibility amount, then the permittee shall amend the closure and post-closure cost estimates to reflect these changes.
- H4. As per 329 IAC 10-22-2(c)(9) and 329 IAC 10-23-3(c)(4)(C)(iii) the facility shall update the closure and post-closure costs for the GCCS Design Plan.

The Permittee shall establish the funding for the revised closure and post-closure cost (GCCS/Landfill Gas) no later than thirty days after receipt of the permit and shall furnish proof of the established funding to IDEM no later than forty-five days after receipt of this permit.

